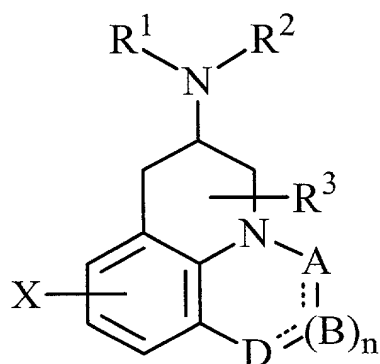


WHAT IS CLAIMED IS:

1. A method of treating or suppressing the symptoms
5 of at least one disorder selected from addictive
disorders, psychoactive substance use disorders,
intoxication disorders, inhalation disorders, alcohol
addiction, tobacco addiction, and nicotine addiction,
said method comprising the step of administering a
10 therapeutically effective, nontoxic amount of an active
agent selected from the group consisting of a
heterocyclic amine, a phenylazacycloalkane, a
cabergoline, an aromatic bicyclic amine, and
pharmaceutically acceptable derivatives or salts of any
15 said active agent, to a patient in need of treatment.

2. The method of claim 1 wherein the active
agent is a heterocyclic amine of the formula:



(I)

or a pharmaceutically acceptable salt thereof, wherein:

R^1 , R^2 , and R^3 are each independently hydrogen, C_{1-6} alkyl, C_{3-5} alkenyl, C_{3-5} alkynyl, C_{3-7} cycloalkyl,

- 5 C_{4-10} cycloalkyl- or phenyl- substituted C_{1-6} alkyl, or R^1 and R^2 are joined to form a C_{3-7} cyclic amine which can contain additional heteroatoms and/or unsaturation;

n is 0 or 1;

- X is hydrogen, C_{1-6} alkyl, halogen, hydroxy, alkoxy,
10 cyano, carboxamide, carboxyl, or carboalkoxyl;

A is CH, CH_2 , CH-halogen, $CHCH_3$, C=O, C=S, C-SCH₃,
C=NH, C-NH₂, C-NHCH₃, C-NHCOOCH₃, C-NHCN, SO₂, or N;

B is CH_2 , CH, CH-halogen, C=O, N, NH, N-CH₃, or O;

and

- 15 D is CH, CH_2 , CH-halogen, C=O, O, N, NH, or N-CH₃.

3. The method of claim 2, wherein:

D is N or NH, n is 0, and R^1 , R^2 , R^3 , X, A, and B are as defined in claim 2; or

- 20 A is CH, CH_2 , $CHCH_3$, C=O, C=S, C-SCH₃, C=NH, C-NH₂, C-NHCH₃, C-NHCOOCH₃, or C-NHCN, and R^1 , R^2 , R^3 , n , X, B, and D are as defined in claim 2; or

A is CH or C=O, and R^1 , R^2 , R^3 , n , X, B, and D are as defined in claim 2.

25

4. The method of claim 2 wherein the active agent is selected from the group consisting of:

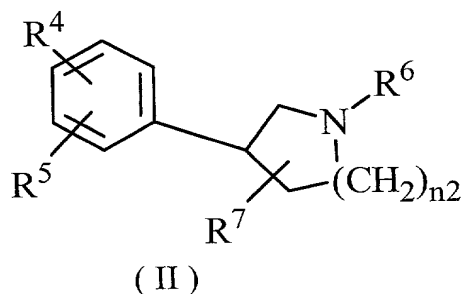
(5R)-5-(methylamino)-5,6-dihydro-4H-imidazo[4,5,1-ij]quinolin-(2H)-one;

(5R)-5-(methylamino)-5,6-dihydro-4H-imidazo[4,5,1-ij]quinoline-2(1H)-thione;

5 (5R)-5-(methylamino)-5,6-dihydro-4H-imidazo[4,5,1-ij]quinoline-2(1H)-thione maleate; and

(5R)-5-(methylamino)-5,6-dihydro-4H-imidazo[4,5,1-ij]quinoline-2(1H)-thione 2-butenedioate.

10 5. The method of claim 1 wherein the active agent is a phenylazacycloalkane compound of the formula:



15

or a pharmaceutically acceptable salt thereof, wherein:

n₂ is 0-3;

R⁴ and R⁵ are independently hydrogen, -OH, CN, CH₂CN,

2- CF₃, 4-CF₃, CH₂CF₃, CH₂CHF₂, CH=CF₂, (CH₂)₂CF₃, ethenyl,
2-propenyl, OSO₂CH₃, OSO₂CF₃, SSO₂CF₃, COR⁷, COOR⁷, CON(R⁷)₂,
SO_{x1}CH₃, wherein x1 is 0-2, SO_{x1}CF₃, O(CH₂)_{x1}CF₃, SO₂N(R⁷)₂,
CH=NOR⁷, COCOOR⁷, COCOON(R⁷)₂, C₁₋₈ alkyl, C₃₋₈ cycloalkyl,
5 CH₂OR⁷, CH₂(R⁷)₂, NR⁷SO₂CF₃, NO₂, halogen, a phenyl at
positions 2, 3 or 4, thienyl, furyl, pyrrole, oxazole,
thiazole, N-pyrroline, triazole, tetrazole or pyridine;
provided that at least one of R⁴ and R⁵ is a substituent
other than hydrogen and provided that when R⁴ or R⁵ is -OH

10 R⁷ is other than hydrogen;

R⁵ is hydrogen, CF₃, CH₂CF₃, C₁-C₈ alkyl, C₃-C₈
cycloalkyl, C₄-C₉ cycloalkyl-methyl, C₂-C₈ alkenyl, C₂-C₈
alkynyl, 3,3,3-trifluoropropyl, 4,4,4-trifluorobutyl,
-(CH₂)_m-R⁸, wherein m is 1-8, CH₂SCH₃ or a C₄-C₈ alkyl
15 bonded to said nitrogen and one of its adjacent carbon
atoms inclusive to form a heterocyclic structure;

R⁷ is independently hydrogen, CF₃, CH₂CF₃, C₁-C₈ alkyl,
C₃-C₈ cycloalkyl, C₄-C₉ cycloalkyl-methyl, C₂-C₈ alkenyl,
C₂-C₈ alkynyl, 3,3,3-trifluoropropyl,
20 4,4,4-trifluorobutyl, -(CH₂)_m-R⁸, wherein m is 1-8;

R⁸ is phenyl optionally substituted with a CN, CF₃,
CH₂CF₃, C₁-C₈ alkyl, C₃-C₈ cycloalkyl, C₄-C₉
cycloalkyl-methyl, C₂-C₈ alkenyl, C₂-C₈ alkynyl,
2-thiophenyl, 3-thiophenyl, -NR⁹CONR⁹R¹⁰, or -CONR⁹R¹⁰; and

25 R⁹ and R¹⁰ are each independently hydrogen, C₁-C₈
alkyl, C₃-C₈ cycloalkyl, C₄-C₉ cycloalkylmethyl, C₂-C₈

alkenyl or C₂-C₈ alkynyl.

6. The method of claim 5 wherein:

R⁴ is CN, and n₂, R⁵, R⁵, and R⁷ are as defined in
5 claim 5; or

R⁵ is H, R⁶ is n-propyl, and n₂, R⁴, and R⁷ are as
defined in claim 5; or

R⁴ is -OSO₂CF₃, and n₂ and R⁵-R⁷ are as defined in
claim 5; or

10 R⁵ is H, R⁶ is C₁₋₈ alkyl, and n₂, R⁴, and R⁷ are as
defined in claim 5; or

R⁴ is 3-OH, R⁵ is H, R⁶ is n-propyl, R⁷ is a C₁₋₈
alkyl, and n is as defined in claim 5; or

n₂ is 2, and R⁴-R⁷ are as defined in claim 5; or

15 n₂ is 0, and R⁴-R⁷ are as defined in claim 5.

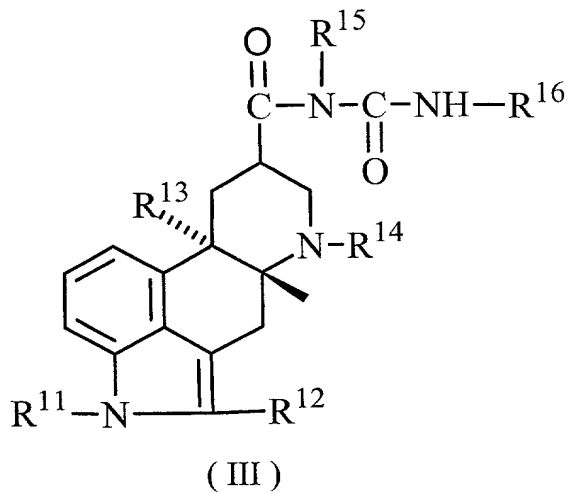
7. The method of claim 5 wherein the
phenylazacycloalkane compound is selected from the group
consisting of:

20 (3S)-3-[3-(methylsulfonyl)phenyl]-1-propylpiperidine
hydrochloride;

(3S)-3-[3-(methylsulfonyl)phenyl]-1-propylpiperidine
hydrobromide; and

(3S)-3-[3-methylsulfonyl)phenyl]-1-propylpiperidine
25 (2E)-2-butenedioate.

8. The method of claim 1 wherein the active agent
is a cabergoline of the formula:



5

10 or a pharmaceutically acceptable salt thereof, wherein:

R¹¹ is hydrogen or methyl;

R¹² is independently hydrogen, halogen, methyl,

formyl, S-R¹⁷, or SO-R¹⁷, wherein R¹⁷ is C₁-C₄ alkyl or phenyl;

R¹³ is hydrogen or methoxy;

R¹⁴ is independently C₁-C₄ alkyl, C₁-C₄ alkenyl, C₁-C₄ alkynyl, benzyl, or phenyl; and

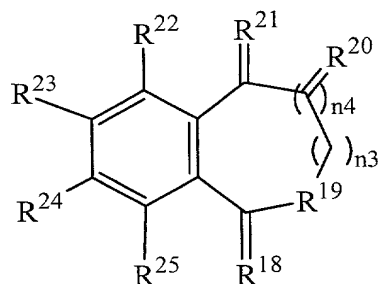
R¹⁵ and R¹⁶ are each independently C₁-C₄ alkyl, cyclohexyl, benzyl, phenyl optionally substituted with halogen or methoxy, or (CH₂)_{n3}N(CH₃)₂, wherein n3 is an integer.

10

9. The method of claim 8 wherein the active agent is 1-((6-allyl ergolin-8β-yl)carbonyl)-1-(3-(dimethylamino)propyl)-3-ethylurea.

15

10. The method of claim 1 wherein the active agent is an aromatic bicyclic amine compound of the formula:



(IV)

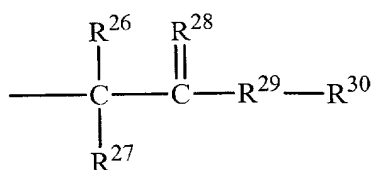
wherein:

n3 is 0 or 1;

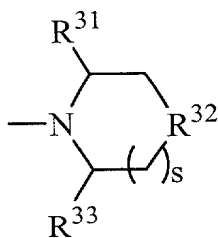
n4 is 0 or 1, provided that R²⁰ is not present when

n4 is 0;

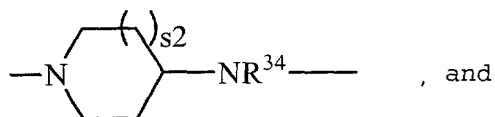
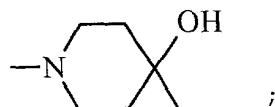
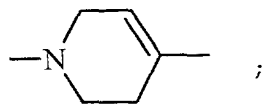
- 5 R¹⁸ is α-R¹⁸⁻¹:β-R¹⁸⁻² where one of R¹⁸⁻¹ or R¹⁸⁻² is selected from the group consisting of H or C₁-C₆ alkyl, and the other of R¹⁸⁻¹ or R¹⁸⁻² is a group of the formula:



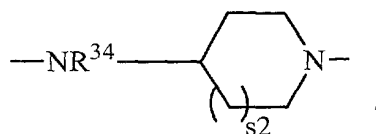
- 10 wherein R²⁶ and R²⁷ are independently selected from H or C₁-C₆-alkyl; R²⁸ is oxygen (O) or R²⁸ is α-R²⁸⁻¹:β-R²⁸⁻², wherein R²⁸⁻¹ and R²⁸⁻² are independently selected from H or C₁-C₆ alkyl; R²⁹ is selected from the group consisting of:



- 15 wherein R³¹ and R³³ are independently selected from H or C₁-C₆ alkyl; R³² is nitrogen (N-) or methine (HC-); and s is 1 or 2;



wherein R^{34} is selected from the group
consisting of H, C_1-C_6 alkyl, C_3-C_7 cycloalkyl, $-C_1-C_3$
alkyl- $(C_3-C_7$ cycloalkyl); and s_2 is 0, 1, or 2;



wherein R^{34} and s_2 are as defined above;
 R^{19} is oxygen (O) or sulfur (S);
 R^{20} is $\alpha-R^{20-1}$: $\beta-R^{20-1}$, wherein one of R^{20-1} and R^{20-2} is
H, C_1-C_6 alkyl, and the other of R^{20-1} or R^{20-2} is H, C_1-C_6
alkyl, phenyl, hydroxy, and $-O-(C_1-C_3$ alkyl);
 R^{21} is $\alpha-R^{21-1}$: $\beta-R^{21-1}$, wherein one of R^{21-1} and R^{21-2} is

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H, C₁-C₆ alkyl, and the other of R²¹⁻¹ or R²¹⁻² is H,
C₁-C₆ alkyl, phenyl, hydroxy, and -O-(C₁-C₃ alkyl);

and when n₄ is 1, one of R²⁰⁻¹ or R²⁰⁻² and one of R²¹⁻¹
or R²¹⁻² can be taken together with the carbon atoms to
5 which they are attached to form a carbon ring of 5-, 6-,
or 7- members;

R²² is H, F, Cl, Br, I, -CONR³⁵R³⁶, -SONR³⁵R³⁶, CF₃,
NR³⁵R³⁶, NO₂, CN, -NR³⁵-CO-R³⁶, -SO₂CF₃, C₁-C₄ alkyl, Si(CH₃)₃,
and phenyl optionally substituted with one or two
10 substituents selected from the group consisting of F, Cl,
Br, I, and -CO-NR³⁵R³⁶, wherein R³⁵ and R³⁶ are
independently selected from the group consisting of H, C₁-
C₆ alkyl, C₃-C₇ cycloalkyl, and -C₁-C₃ alkyl-(C₃-C₇
cycloalkyl);

15 and where R²² and one of R²¹⁻¹ or R²¹⁻² are taken
together with the carbon atoms to which they are attached
to form a carbon ring of 5-, 6-, or 7-members;

R²³ is H, F, Cl, Br, I, -CONR³⁷R³⁸, -SONR³⁷R³⁸, CF₃,
NR³⁷R³⁸, NO₂, CN, -NR³⁷-CO-R³⁸, -SO₂CF₃, C₁-C₄ alkyl, Si(CH₃)₃,
20 and phenyl optionally substituted with one or two
substituents selected from the group consisting of F, Cl,
Br, I, and -CO-NR³⁷R³⁸, wherein R³⁷ and R³⁸ are
independently selected from the group consisting of H, C₁-
C₆ alkyl, C₃-C₇ cycloalkyl, and -C₁-C₃ alkyl-(C₃-C₇
25 cycloalkyl);

R²⁴ is H, F, Cl, Br, I, -CONR³⁹R⁴⁰, -SONR³⁹R⁴⁰, CF₃,
NR³⁹R⁴⁰, NO₂, CN, -NR³⁹-CO-R⁴⁰, -SO₂CF₃, C₁-C₄ alkyl, Si(CH₃)₃,
and phenyl optionally substituted with one or two
substituents selected from the group consisting of F, Cl,
30 Br, I, and -CO-NR³⁹R⁴⁰, wherein R³⁹ and R⁴⁰ are
independently selected from the group consisting of H, C₁-
C₆ alkyl, C₃-C₇ cycloalkyl, and -C₁-C₃ alkyl-(C₃-C₇
cycloalkyl);

R²⁵ is H, F, Cl, Br, I, -CONR⁴¹R⁴², -SONR⁴¹R⁴², CF₃,
35 NR⁴¹R⁴², NO₂, CN, -NR⁴¹-CO-R⁴², -SO₂CF₃, C₁-C₄ alkyl, Si(CH₃)₃,

and phenyl optionally substituted with one or two substituents selected from the group consisting of F, Cl, Br, I, and $-\text{CO}-\text{NR}^{41}\text{R}^{42}$, wherein R^{41} and R^{42} are independently selected from the group consisting of H, C_1 - C_6 alkyl, C_3 - C_7 cycloalkyl, and $-\text{C}_1$ - C_3 alkyl- $(\text{C}_3$ - C_7 cycloalkyl);

with the proviso that not more than two of R^{22} , R^{23} , R^{24} , and R^{25} are other than H; and

R^{30} is selected from the group consisting of:
10 phenyl optionally substituted with one or two substituents selected from the group consisting of CF_3 , COR^{43} , COOR^{43} , CN, NO_2 , $\text{NR}^{44}-\text{CO}-\text{R}^{45}$, $-\text{S}-(\text{C}_1$ - C_6 alkyl), $\text{NR}^{44}\text{R}^{45}$, or a group represented by R^{46} ;

2-, 3-, and 4-pyridinyl optionally substituted with
15 one or two substituents represented by R^{46} ; and

2-, 4-, and 5-pyrimidinyl optionally substituted with one or two substituents represented by R^{46} ;

wherein R^{43} , R^{44} and R^{45} are independently selected from the group consisting of H, C_1 - C_6 alkyl, C_3 - C_7 cycloalkyl,
20 $-\text{C}_1$ - C_3 alkyl- $(\text{C}_3$ - C_7 cycloalkyl); and R^{46} is selected from the group consisting of F, Cl, Br, I, $-\text{CO}-\text{NR}^{44}\text{R}^{45}$, $-\text{SO}_2\text{NR}^{44}\text{R}^{45}$, OH, SH, C_1 - C_6 alkyl, C_3 - C_6 cycloalkyl, $-\text{OR}^{47}$, $-\text{CH}_2$ - $(\text{C}_3$ - C_6 cycloalkyl), $-\text{CH}_2$ -phenyl, C_3 - C_6 cycloalkyl, $-\text{SO}_2\text{CF}_3$, and
25 $-\text{CH}_2\text{CF}_3$, wherein R^{44} and R^{45} are as previously defined and R^{47} is C_1 - C_6 alkyl; and

enantiomers and diastereomers thereof, where such exist, and pharmaceutically acceptable salts thereof.

30

11. The method of claim 10 wherein:
one of the substituents represented by R^{18-1} or R^{18-2} is H, and the other substituent represented by R^{18-1} or R^{18-2} is a group of the formula:



12. The method of claim 10 wherein the active agent is selected from the group consisting of:

1-(4-fluorophenyl)-4-[2-(isochroman-1-yl)ethyl]piperazine;

1-[2-(isochroman-1-yl)ethyl]-4-phenylpiperazine;

1-[2-(isochroman-1-yl)ethyl]-4-(4-methoxyphenyl)piperazine;

(-)-4-[4-[2-(isochroman-1-yl)ethyl]piperazin-1-yl]benzamide; and

(-)-4-[4-[2-(isochroman-1-yl)ethyl]piperazin-1-yl]benzenesulfonamide.

20

25 15. The method of claim 1 wherein the active agent

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is used to reduce the smoking and/or chewing of tobacco-
or nicotine-containing products.

16. The method of claim 1 wherein the active agent
5 is administered to the patient three times a day.

17. The method of claim 1 wherein the active agent
is selected from the group consisting of a heterocyclic
amine, a phenylazacycloalkane, and a cabergoline
10 administered in a dose of about 0.01 mg/day to about 10.0
mg/day.

18. The method of claim 17 wherein the active agent
is selected from the group consisting of a heterocyclic
15 amine, a phenylazacycloalkane, a cabergoline, and a
cabergoline-type derivative administered in a dose of
about 0.125 mg/day to about 6 mg/day.

19. The method of claim 18 wherein the active agent
20 is administered in an amount from about 0.375 mg/day to
about 5 mg/day.

20. The method of claim 19 wherein the active agent
is administered in an amount from about 0.75 mg/day to
25 about 4.5 mg/day.

21. The method of claim 17 wherein an initial dose
of active agent of about 0.125 mg/day administered to the
patient three times a day is titrated to higher levels
every five to seven days until therapeutic effect is
5 achieved.

22. The method of claim 1 wherein the active agent
is an aromatic bicyclic amine administered in an amount
of from about 5 mg/day to about 120 mg/day.

10

23. The method of claim 22 wherein the aromatic
bicyclic amine is administered in an amount of from about
20 mg/day to about 100 mg/day.

15

24. The method of claim 23 wherein the aromatic
bicyclic amine is administered in an amount of from about
40 mg/day to about 80 mg/day.

25. The method of claim 22 wherein an initial dose
20 of active agent of about 5 mg/day is administered to the
patient three times a day and is titrated to higher
levels every five to seven days until therapeutic effect
is achieved.